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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,042	09/25/2000	Christoph Widmer	32992	2828

116 7590 12/14/2005

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EXAMINER

MICHALSKI, JUSTIN I

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/669,042	WIDMER ET AL.	
	Examiner	Art Unit	
	Justin Michalski	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8 and 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 22 reference 65b is not found in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2644

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "said device having a unitary shell member forming said outer surface and defining an inner space distinct from said channel" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Figures 25 and 26 disclose an acoustical/electrical converter, channel (81 and 89) connected to ambient but no inner space distinct from said channel. Figures 22 and 23 disclose a channel (within shell member on sides of inner space 67) however the channels are not distinct from the inner space (67).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 3 and 14 are objected to because of the following informalities: Claim 3 contains the limitation "or output" in line 4. There is no antecedent basis for "or output" regarding claim 8. Claim 14 contains "said output" in line 2. There is no antecedent basis for this limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 2 and 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding Claim 2, the specifications and drawings do not disclose a channel (as claimed in claims 8, 10, or 11 which features varying cross-sectional dimensions or shapes. Figures 22, 23, 25, and 26 disclose a channel but do not disclose varying cross-sectional dimensions. All figures and embodiments with varying cross-sectional dimensions disclosed in the instant application refer only to venting channels and not a channel as claimed linking a converter to an outer surface.

Regarding Claim 6, there is no disclosure in the instant application as to a channel as claimed in claims 8 or 11 which is part of a venting system for the eardrum.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 4, 7, 8, and 10-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Gerbert (US Patent 6,549,635).

Regarding Claim 8, Gerbert discloses a hearing device comprising an acoustical/electrical converter (2) with an acoustical input being linked by means of a channel to a coupling opening arrangement exclusively at an outer surface of said device adapted to be exposed to ambient when an individual wears said hearing device (channel from 2 to outer surface), said device having a unitary shell member (1) forming said outer surface and defining an inner space distinct from said channel, said channel comprising a part provided in and along said shell member and being formed in the material of said shell member (Fig. 1).

Regarding Claim 10, Gerbert discloses a hearing device comprising: a one-part shell member forming at least a portion of an outer surface of said device, said shell

Art Unit: 2644

member defining an interior space of said device (Fig. 1, inner space 5), said shell member (1) forming a channel out of the material of said shell member, said channel being formed in and along said shell member and being distinct of said interior space (channel from 2 to outer surface), and, over at least a substantial segment of its length, said channel running essentially parallel to said outer surface (Fig. 1); and at least one of an acoustical/electrical converter (2) and an electrical/acoustical converter (4) including an acoustical input or output, respectively, wherein said input or output is acoustically linked to a coupling opening via said channel forming an acoustic path from said input or output to said coupling opening exclusively at an outer surface of said device and adapted to be exposed to ambient or an ear canal of an individual wearing said hearing device but not both, and further wherein said channel is tuned to have specific acoustical characteristics.

Regarding Claim 11, Gerbert discloses a hearing device comprising: a one-part shell member forming at least a portion of an outer surface of said device (1), said shell member defining an interior space of said device (5), said shell member forming a channel out of the material of said shell member (from 4 to edge of device), said channel being formed in and along said shell member and being distinct from said interior space; an electrical/acoustical converter including an acoustical output (4), wherein an acoustic path is formed from said output to a coupling opening entirely in said shell member using said channel, whereby said output is acoustically linked to said coupling opening via said channel along at least some portion of said acoustic path.\

Regarding Claim 4, Gerbert further discloses the channel extends parallel to the outer surface of the device (Fig. 1, parallel to sides of device).

Regarding Claim 7, Gerbert further discloses another channel that extends in parallel fashion (channel from 2 to outer surface and channel from 4 to outer surface).

Regarding Claims 12 and 13, Gerbert further discloses the output (output of 4) is to be exposed to an ear canal of an individual wearing device (Gerbert discloses in the ear hearing aid).

Regarding Claim 14, Gerbert further discloses an output linked to an acoustic opening (4 to outer surface).

Regarding Claim 15, Gerbert further discloses in put directly linked to said channel (2 to outer surface).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3, 5, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gebert (US Patent 6,549,635) in view of Johnson (US Patent 4,311,206).

Gebert discloses a hearing device comprising: a one-part shell member forming at least a portion of an outer surface of said device (Fig. 1 shell1), said shell member defining an interior space of said device (5), said shell member forming a channel out of

Art Unit: 2644

the material of said shell member, said channel being formed in and along said shell member and being distinct of said interior space, and, over at least a substantial segment of its length, said channel running essentially parallel to said outer surface (channel from transducer 2 to outer surface); and at least one of an acoustical/electrical converter (2) and an electrical/acoustical converter (4) including an acoustical input or output, respectively, wherein said input or output is acoustically linked to a coupling opening via said channel forming an acoustic path from said input or output to said coupling opening exclusively at an outer surface of said device and adapted to be exposed to ambient or an ear canal of an individual wearing said hearing device but not both (channels from 2 to outer surface and channel from 4 to outer surface). Gebert does not disclose the channel is tuned to have specific acoustical characteristics. Johnson discloses a hearing device with an output transducer

Johnson discloses an ear-plug device (Figure 5) with a channel used for acoustic conduction (references 54) varying in cross-sectional dimensions over the length of the ear-plug device. Johnson teaches the shape provides a resonance system that will resonate at selected frequencies when acoustic energy is applied. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the hearing aid disclosed by Gebert with the varying cross-sectional (i.e. tuned) channel as disclosed by Johnson in order to produce a more customized audio output.

Regarding Claim 3, Gebert discloses a device as stated apropos of claim 8 and 11 but does not disclose a matching stub line. Johnson discloses an ear-plug device (Figure 5) with a channel used for acoustic conduction (references 54) varying in cross-sectional dimensions over the length of the ear-plug device. Johnson teaches the shape provides a resonance system that will resonate at selected frequencies when acoustic energy is applied. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the hearing aid disclosed by Gebert with the varying cross-sectional (i.e. tuned) channel as disclosed by Johnson in order to produce a more customized audio output.

Regarding Claim 5, Johnson further discloses a custom molded hearing aid (Col. 3, lines 17-20).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2644

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM



12/7/05



HUYEN LE
PRIMARY EXAMINER